[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2015-5812; Directorate Identifier 2015-NM-077-AD]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to supersede Airworthiness Directive (AD) 2011-23-05, which applies to certain The Boeing Company Model 737-300, -400, and -500 series airplanes. AD 2011-23-05 currently requires repetitive inspections for cracking of the 1.04-inch nominal diameter wire penetration hole, and applicable related investigative and corrective actions. Since we issued AD 2011-23-05, an evaluation by the design approval holder (DAH) indicates that the fuselage frames and frame reinforcements are subject to widespread fatigue damage (WFD). This proposed AD would add new inspection areas, a modification that terminates certain inspections, post-modification inspections, and repair if necessary. We are proposing this AD to detect and correct fatigue cracking of the fuselage frames and frame reinforcements, which could result in reduced structural integrity of the airplane.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. **ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43

and 11.45, by any of the following methods:

• Federal eRulemaking Portal: Go to http://www.regulations.gov. Follow the instructions for submitting comments.

- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet https://www.myboeingfleet.com. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221. It is also available on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2015-5812.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2015-5812; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Wayne Lockett, Aerospace Engineer, Airframe Branch, ANM-120S, Seattle Aircraft Certification Office (ACO), FAA, 1601

Lind Avenue SW., Renton, Washington 98057-3356; phone: 425-917-6447;

fax: 425-917-6590; email: wayne.lockett@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2015-5812; Directorate Identifier 2015-NM-077-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to http://www.regulations.gov, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

Structural fatigue damage is progressive. It begins as minute cracks, and those cracks grow under the action of repeated stresses. This can happen because of normal operational conditions and design attributes, or because of isolated situations or incidents such as material defects, poor fabrication quality, or corrosion pits, dings, or scratches. Fatigue damage can occur locally, in small areas or structural design details, or globally. Global fatigue damage is general degradation of large areas of structure with similar structural details and stress levels. Multiple-site damage is global damage that occurs in a large structural element such as a single rivet line of a lap splice joining two large skin panels. Global damage can also occur in multiple elements such as adjacent frames or

stringers. Multiple-site-damage and multiple-element-damage cracks are typically too small initially to be reliably detected with normal inspection methods. Without intervention, these cracks will grow, and eventually compromise the structural integrity of the airplane, in a condition known as WFD. As an airplane ages, WFD will likely occur, and will certainly occur if the airplane is operated long enough without any intervention.

The FAA's WFD final rule (75 FR 69746, November 15, 2010) became effective on January 14, 2011. The WFD rule requires certain actions to prevent structural failure due to WFD throughout the operational life of certain existing transport category airplanes and all of these airplanes that will be certificated in the future. For existing and future airplanes subject to the WFD rule, the rule requires that DAHs establish a limit of validity (LOV) of the engineering data that support the structural maintenance program. Operators affected by the WFD rule may not fly an airplane beyond its LOV, unless an extended LOV is approved.

The WFD rule (75 FR 69746, November 15, 2010) does not require identifying and developing maintenance actions if the DAHs can show that such actions are not necessary to prevent WFD before the airplane reaches the LOV. Many LOVs, however, do depend on accomplishment of future maintenance actions. As stated in the WFD rule, any maintenance actions necessary to reach the LOV will be mandated by airworthiness directives through separate rulemaking actions.

In the context of WFD, this action is necessary to enable DAHs to propose LOVs that allow operators the longest operational lives for their airplanes, and still ensure that WFD will not occur. This approach allows for an implementation strategy that provides flexibility to DAHs in determining the timing of service information development (with

FAA approval), while providing operators with certainty regarding the LOV applicable to their airplanes.

On October 20, 2011, we issued AD 2011-23-05, Amendment 39-16856 (76 FR 67343, November 1, 2011), for certain Model 737-300, -400, and -500 series airplanes. AD 2011-23-05 superseded AD 2009-02-06 R1, Amendment 39-16015 (74 FR 45979, September 8, 2009). AD 2011-23-05 requires repetitive inspections for cracking of the 1.04-inch nominal diameter wire penetration hole, and applicable related investigative and corrective actions. AD 2011-23-05 resulted from reports of cracking in the frame, or in the frame and frame reinforcement, common to the 1.04-inch nominal diameter wire penetration hole intended for wire routing; and recent reports of multiple adjacent frame cracking found before the compliance time required by AD 2009-02-06 R1. We issued AD 2011-23-05 to detect and correct cracking in the fuselage frames and frame reinforcements, which could reduce the structural capability of the frames to sustain limit loads, and result in cracking in the fuselage skin and subsequent rapid depressurization of the airplane.

Actions Since AD 2011-23-05, Amendment 39-16856 (76 FR 67343, November 1, 2011), was Issued

Since we issued AD 2011-23-05, Amendment 39-16856 (76 FR 67343, November 1, 2011), an evaluation by the DAH indicates that the fuselage frames and frame reinforcements are subject to WFD.

Related Service Information under 1 CFR part 51

We reviewed Boeing Alert Service Bulletin 737-53A1279, Revision 2, dated April 21, 2015. The service information describes procedures for the following actions.

• Inspections of wire penetration holes, standoff/tooling holes, and the production fastener holes for cracking in the forward cargo compartment frames and

frame reinforcements, between stringer (S) S-19 and S-22, on both left and right sides of the airplane.

- A preventive modification of frames between S-19 and S-22.
- Post-modification inspections.
- Repairs.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section of this NPRM.

FAA's Determination

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of these same type designs.

Proposed AD Requirements

This proposed AD would retain all requirements of AD 2011-23-05, Amendment 39-16856 (76 FR 67343, November 1, 2011). This proposed AD would require accomplishing the actions specified in the service information described previously, except as discussed under "Differences Between this Proposed AD and the Service Information." For information on the procedures and compliance times, see this service information at http://www.regulations.gov by searching for and locating Docket No. FAA-2015-5812.

Differences Between this Proposed AD and the Service Information

Boeing Alert Service Bulletin 737-53A1279, Revision 2, dated April 21, 2015, specifies to contact the manufacturer for instructions on how to repair certain conditions, but this proposed AD would require repairing those conditions in one of the following ways:

- In accordance with a method that we approve; or
- Using data that meet the certification basis of the airplane, and that have been approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) whom we have authorized to make those findings.

Explanation of Compliance Time

The compliance time for the modification specified in this proposed AD for addressing WFD was established to ensure that discrepant structure is modified before WFD develops in airplanes. Standard inspection techniques cannot be relied on to detect WFD before it becomes a hazard to flight. We will not grant any extensions of the compliance time to complete any AD-mandated service bulletin related to WFD without extensive new data that would substantiate and clearly warrant such an extension.

Costs of Compliance

We estimate that this proposed AD affects 605 airplanes of U.S. registry. We estimate the following costs to comply with this proposed AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspections [retained actions from AD 2011-23-05, Amendment 39-16856 (76 FR 67343, November 1, 2011)	16 work-hours X \$85 per hour = \$1,360 per inspection cycle	\$0	\$1,360 per inspection cycle	\$822,800 per inspection cycle
Inspections [new proposed action]	32 work-hours X \$85 per hour = \$2,720 per inspection cycle	\$0	\$2,720 per inspection cycle	\$1,645,600 per inspection cycle
Modification [new proposed action]	32 work-hours X \$85 per hour = \$2,720	\$0	\$2,720	\$1,645,600

We estimate the following costs to do any necessary repairs that would be required based on the results of the proposed inspection. We have no way of determining the number of aircraft that might need these repairs:

On-condition costs

Action	Labor cost	Parts cost	Cost per product
Repair	18 work-hours X \$85 per hour = \$1,530	None	\$1,530

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We have determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that the proposed regulation:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
 - (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by removing Airworthiness Directive (AD) 2011-23-05, Amendment 39-16856 (76 FR 67343, November 1, 2011), and adding the following new AD:

The Boeing Company: Docket No. FAA-2015-5812; Directorate Identifier 2015-NM-077-AD.

(a) Comments Due Date

The FAA must receive comments on this AD action by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD replaces AD 2011-23-05, Amendment 39-16856 (76 FR 67343, November 1, 2011).

(c) Applicability

This AD applies to The Boeing Company Model 737-300, -400, and -500 series airplanes; certificated in any category; as identified in Boeing Alert Service Bulletin 737-53A1279, Revision 2, dated April 21, 2015.

(d) Subject

Air Transport Association (ATA) of America Code 53, Fuselage.

(e) Unsafe Condition

This AD was prompted by an evaluation by the design approval holder (DAH) indicates that the fuselage frames and frame reinforcements are subject to widespread fatigue damage (WFD). We are issuing this AD to detect and correct fatigue cracking of the fuselage frames and frame reinforcements, which could result in reduced structural integrity of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Retained Inspection, with References to Terminating Actions

This paragraph restates the requirements of paragraph (g) of AD 2011-23-05, Amendment 39-16856 (76 FR 67343, November 1, 2011), with references to terminating actions. At the applicable time specified in paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 737-53A1279, Revision 1, dated September 2, 2011, except as required by paragraphs (k)(1), (k)(2), and (k)(4) of this AD: Do a high frequency eddy current (HFEC) surface or HFEC hole/edge inspection for any cracking of the 1.04-inch nominal diameter wire penetration hole in the frame and frame reinforcement between

stringer (S) S-20 and S-21, in accordance with Part 2 of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1279, Revision 1, dated September 2, 2011. Accomplishment of the applicable inspections required by paragraphs (m) and (n) of this AD terminates the inspections required by this paragraph. Accomplishment of the modification required by paragraph (p) of this AD terminates the inspections required by this paragraph for the modified area only.

(h) Retained Repetitive Inspections, with References to Terminating Actions

This paragraph restates the requirements of paragraph (h) of AD 2011-23-05, Amendment 39-16856 (76 FR 67343, November 1, 2011), with references to terminating actions. Within 4,500 flight cycles after accomplishment of the most recent inspection specified in Part 2 or Part 4 of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1279, Revision 1, dated September 2, 2011, or within 90 days after November 16, 2011 (the effective date of AD 2011-23-05), whichever occurs later: Do an HFEC hole/edge inspection for cracking of the 1.04-inch nominal diameter wire penetration hole in the frame and frame reinforcement between S-20 and S-21, in accordance with Part 4 of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1279, Revision 1, dated September 2, 2011. Repeat the inspection thereafter at intervals not to exceed 4,500 flight cycles. Accomplishment of the applicable inspections required by paragraphs (m) and (n) of this AD, terminates the inspections required by this paragraph. Accomplishment of the modification specified in paragraph (j) or (p) of this AD terminates the repetitive inspections required by this paragraph for the modified area only. Accomplishment of the repair specified in paragraph (i) of this AD terminates the repetitive inspections required by this paragraph for the repaired area only.

(i) Retained Repair, with No Changes

This paragraph restates the requirements of paragraph (i) of AD 2011-23-05, Amendment 39-16856 (76 FR 67343, November 1, 2011), with no changes. If any cracking is found during any inspection required by paragraph (g) or (h) of this AD: Before further flight, repair the crack including doing all applicable related investigative and corrective actions, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1279, Revision 1, dated September 2, 2011, except as required by paragraph (k)(3) of this AD. All applicable related investigative and corrective actions must be done before further flight. Accomplishment of the requirements of this paragraph terminates the repetitive inspection requirements of paragraph (h) of this AD for the repaired location of that frame.

(j) Retained Optional Terminating Action, with New Limitation

This paragraph restates the optional action provided in paragraph (j) of AD 2011-23-05, Amendment 39-16856 (76 FR 67343, November 1, 2011), with new limitation. Accomplishment of the preventive modification before the effective date of this AD, including doing all related investigative and applicable corrective actions, specified in Part 5 of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1279, Revision 1, dated September 2, 2011, except as required by paragraph (k)(3) of this AD, terminates the repetitive inspection requirements of paragraph (h) of this AD for the modified location of that frame, provided the modification is done before further flight after an inspection required by paragraph (g) or (h) of this AD has been done, and no cracking was found on that frame location during that inspection.

(k) Retained Exceptions to Service Information Specifications, with No Changes

This paragraph restates the requirements of paragraph (k) of AD 2011-23-05, Amendment 39-16856 (76 FR 67343, November 1, 2011), with no changes. The following exceptions apply as specified in paragraphs (g), (i), and (j) of this AD.

- (1) Where paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 737-53A1279, Revision 1, dated September 2, 2011, refers to a compliance time "from date on Revision 1 of this service bulletin," this AD requires compliance within the specified compliance time after November 16, 2011 (the effective date of AD 2011-23-05, Amendment 39-16856 (76 FR 67343, November 1, 2011)).
- (2) For airplanes meeting all of the criteria specified in paragraphs (k)(2)(i), (k)(2)(ii), and (k)(2)(iii) of this AD: The compliance time for the initial inspection specified in Part 2 of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1279, Revision 1, dated September 2, 2011, and required by paragraph (g) of this AD, may be extended to 90 days after November 16, 2011 (the effective date of AD 2011-23-05, Amendment 39-16856 (76 FR 67343, November 1, 2011)).
- (i) Model 737-300 series airplanes in Group 1, line numbers 1001 through 2565 inclusive;
- (ii) Airplanes that have accumulated 40,000 or more total flight cycles as of November 16, 2011 (the effective date of AD 2011-23-05, Amendment 39-16856 (76 FR 67343, November 1, 2011)); and
- (iii) Airplanes on which the modification specified in Boeing Service Bulletin 737-53-1273, dated September 20, 2006; Revision 1, dated December 21, 2006; Revision 2, dated June 4, 2007; Revision 3, dated December 7, 2009; or Revision 4, dated July 23, 2010; has been done, including any configuration or deviation that has been approved as an AMOC during accomplishment of these service bulletins, by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been

authorized by the Manager, Seattle Aircraft Certification Office (ACO) to make those findings.

- (3) Where Boeing Alert Service Bulletin 737-53A1279, Revision 1, dated September 2, 2011, specifies to contact Boeing for appropriate repair instructions: Before further flight, repair the crack using a method approved in accordance with the procedures specified in paragraph (u) of this AD.
- (4) The "Condition" column of paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 737-53A1279, Revision 1, dated September 2, 2011, refers to total flight cycles "at the date of/on this service bulletin." However, this AD applies to the airplanes with the specified total flight cycles as of November 16, 2011 (the effective date of AD 2011-23-05, Amendment 39-16856 (76 FR 67343, November 1, 2011)).

(1) Retained Credit for Previous Actions, with No Changes

This paragraph restates the requirements of paragraph (l) of AD 2011-23-05, Amendment 39-16856 (76 FR 67343, November 1, 2011), with no changes. Actions done in accordance with Boeing Alert Service Bulletin 737-53A1279, dated December 18, 2007, before November 16, 2011 (the effective date of AD 2011-23-05), are acceptable for compliance with the corresponding actions required by paragraphs (g), (h), (i), and (j) of this AD.

(m) New Requirement of this AD: Inspections of Frames and Frame Reinforcements between S-19 and S-22 for Certain Airplanes on Which Certain Inspections Have Not Been Accomplished

For airplanes identified as Groups 1 through 6, Configuration 3, in Boeing Alert Service Bulletin 737-53A1279, Revision 2, dated April 21, 2015, with 30,000 total flight cycles or fewer as of the effective date of this AD, on which any inspections specified in Boeing Alert Service Bulletin 737-53A1279, Revision 1, dated September 2, 2011, have not been accomplished: Except as required by paragraphs (t)(1) and (t)(2) of this AD, at

the applicable time specified in table 1 of paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 737-53A1279, Revision 2, dated April 21, 2015, or within 4,500 flight cycles after the effective date of this AD, whichever occurs later, do inspections for cracking at certain locations in the frames and frame reinforcements in accordance with "Part 2 – Initial Detail and HFEC Inspection" of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1279, Revision 2, dated April 21, 2015. Repeat the inspections for cracking at certain locations in the frames and frame reinforcements as specified in "Part 4 – Repeat Detail and HFEC Inspections" of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1279, Revision 2, dated April 21, 2015, thereafter at the applicable interval specified in paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 737-53A1279, Revision 2, dated April 21, 2015; or, before further flight after accomplishing an inspection and no cracking was found, do "Part 5 – Preventative Modification" as specified in the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1279, Revision 2, dated April 21, 2015. Accomplishment of the preventive modification specified in this paragraph terminates the repetitive inspections required by this paragraph for the modified area only. Do all actions specified in this paragraph in accordance with Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1279, Revision 2, dated April 21, 2015.

(n) New Requirement of this AD: Inspections of Frames and Frame Reinforcements between S-19 and S-22 for Groups 1-6, Configuration 3, Airplanes

For airplanes identified as Groups 1 through 6, Configuration 3, in Boeing Alert Service Bulletin 737-53A1279, Revision 2, dated April 21, 2015, with more than 30,000 total flight cycles as of the effective date of this AD, or that have been inspected as specified in Boeing Alert Service Bulletin 737-53A1279, Revision 1, dated September 2, 2011: Except as required by paragraphs (t)(1) and (t)(2) of this AD, at the applicable time specified in table 1 of paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin

737-53A1279, Revision 2, dated April 21, 2015, do inspections for cracking at certain locations of the frames and frame reinforcements in accordance with "Part 4 – Repeat Detail and HFEC Inspections" of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1279, Revision 2, dated April 21, 2015. Repeat the inspections thereafter at the applicable interval specified in paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 737-53A1279, Revision 2, dated April 21, 2015; or, before further flight after accomplishing an inspection and no cracking was found, do "Part 5 - Preventative Modification" as specified in the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1279, Revision 2, dated April 21, 2015. Accomplishment of the preventive modification specified in this paragraph terminates the repetitive inspections required by this paragraph for the modified area only.

(o) New Requirement of this AD: Repairs

If any crack is found during any inspection required by paragraph (m) or (n) of this AD: Before further flight, repair, in accordance with "Part 3 – Repair" of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1279, Revision 2, dated April 21, 2015, except where Boeing Alert Service Bulletin 737-53A1279, Revision 2, dated April 21, 2015, specifies to contact Boeing for damage removal and repair instructions, repair before further flight using a method approved in accordance with the procedures specified in paragraph (u) of this AD. Accomplishing a repair terminates the inspections required by paragraphs (m) and (n) of this AD in the repaired area only. Accomplishment of a repair terminates the modification required by paragraph (p) of this AD at the repaired location only.

(p) New Requirement of this AD: Preventative Modification of the Frames between S-19 and S-22

For airplanes identified as Groups 1 through 6, Configuration 3, in Boeing Alert Service Bulletin 737-53A1279, Revision 2, dated April 21, 2015: Except as required by

paragraphs (t)(1) and (t)(2) of this AD, at the applicable time specified in table 2 of paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 737-53A1279, Revision 2, dated April 21, 2015, do the preventive modification of the frames between S-19 and S-22, in accordance with "Part 5 – Preventative Modification" of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1279, Revision 2, dated April 21, 2015. Accomplish of the modification required by this paragraph terminates the requirements of paragraphs (g), (h), (m), and (n) of this AD for the modified location only.

(q) New Requirement of this AD: Inspections of Preventive Modification for Groups 1-3, Configuration 1, Airplanes

For airplanes identified as Groups 1 through 3, Configuration 1, in Boeing Alert Service Bulletin 737-53A1279, Revision 2, dated April 21, 2015: Except as required by paragraph (t)(1) of this AD, at the applicable time specified in table 3 of paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 737-53A1279, Revision 2, dated April 21, 2015, do HFEC, LFEC, and detailed inspections for cracking in accordance with "Part 7 – INSPECTION OF PREVENTATIVE MODIFICATION" of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1279, Revision 2, dated April 21, 2015. Repeat the inspections thereafter at the applicable interval specified in paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 737-53A1279, Revision 2, dated April 21, 2015. If any cracking is found during any inspection required by this paragraph, before further flight, repair using a method approved in accordance with the procedures specified in paragraph (u) of this AD.

(r) New Requirement of this AD: Inspections of Preventive Modification for Groups 1-6, Configuration 2

For airplanes identified as Groups 1 through 6, Configuration 2, in Boeing Alert Service Bulletin 737-53A1279, Revision 2, dated April 21, 2015: Except as required by

paragraph (t)(1)of this AD, at the applicable time specified in table 4 or table 6 of paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 737-53A1279, Revision 2, dated April 21, 2015, do HFEC, LFEC, and detailed inspections for cracking in accordance with "Part 8 – INSPECTION OF PREVENTATIVE MODIFICATION" of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1279, Revision 2, dated April 21, 2015. Repeat the inspections thereafter at the applicable interval specified in table 4 or table 6 of paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 737-53A1279, Revision 2, dated April 21, 2015. If any cracking is found during any inspection required by this paragraph, before further flight, repair using a method approved in accordance with the procedures specified in paragraph (u) of this AD.

(s) New Requirement of this AD: Inspections of Preventive Modification for Group 4-6, Configuration 1, Airplanes

For airplanes identified as Group 4 through 6, Configuration 1, in Boeing Alert Service Bulletin 737-53A1279, Revision 2, dated April 21, 2015: At the applicable time specified in table 5 of paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 737-53A1279, Revision 2, dated April 21, 2015, except as required by paragraph (t)(1) of this AD: Do HFEC, LFEC and detailed inspections for cracking in accordance with "Part 7 – INSPECTION OF PREVENTATIVE MODIFICATION" of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1279, Revision 2, dated April 21, 2015. Repeat the inspections thereafter at the applicable time specified in paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 737-53A1279, Revision 2, dated April 21, 2015. If any cracking is found during any inspection required by this paragraph, before further flight, repair using a method approved in accordance with the procedures specified in paragraph (u) of this AD.

(t) New Requirement of this AD: Exceptions to Service Bulletin Specifications

- (1) Where paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 737-53A1279, Revision 2, dated April 21, 2015, refers to a compliance time "after the Revision 2 date of this service bulletin," this AD requires compliance within the specified compliance time after the effective date of this AD.
- (2) The "Condition" column in table 1 and table 2 of paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 737-53A1279, Revision 2, dated April 21, 2015, refers to total flight cycles "at the Revision 2 date of this service bulletin." However, this AD applies to the airplanes with the specified total flight cycles as of the effective date of this AD.

(u) Alternative Methods of Compliance (AMOCs)

- (1) The Manager, Los Angeles Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (v)(1) of this AD. Information may be emailed to: 9-ANM-LAACO-AMOC-Requests@faa.gov.
- (2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.
- (3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO, to make those findings. To be approved, the

repair method, modification deviation, or alteration deviation must meet the certification

basis of the airplane and the approval must specifically refer to this AD.

(4) AMOCs approved for AD 2009-02-06, Amendment 39–15796 (74 FR 10469,

March 11, 2009); AD 2009-02-06 R1, Amendment 39-16015 (74 FR 45979,

September 6, 2009); and AD 2011-23-05, Amendment 39-16856 (76 FR 67343,

November 1, 2011); are approved as AMOCs for the corresponding provisions of this

AD.

(v) Related Information

(1) For more information about this AD, contact Wayne Lockett, Aerospace

Engineer, Airframe Branch, ANM-120S, Seattle Aircraft Certification Office (ACO),

FAA, 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: 425-917-6447;

fax: 425-917-6590; email: wayne.lockett@faa.gov.

(2) For service information identified in this AD, contact Boeing Commercial

Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle,

WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet

https://www.myboeingfleet.com. You may view this referenced service information at the

FAA, 1601 Lind Avenue SW., Renton, Washington. For information on the availability

of this material at the FAA, call 425-227-1221.

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